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Software Agents: An Overview

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Knowledge Engineering Review, Vol. 11, No 3, pp.1-40, Sept 1996. © Cambridge University Press, 1996

Abstract

Agent software is a rapidly developing area of research. However, the overuse of the word ëagentí has tended to mask the fact that, in reality, there is a truly heterogeneous body of research being carried out under this banner. This overview paper presents a typology of agents. Next, it places agents in context, defines them and then goes on, inter alia, to overview critically the rationales, hypotheses, goals, challenges and state-of-the-art demonstrators of the various agent types in our typology. Hence, it attempts to make explicit much of what is usually implicit in the agents literature. It also proceeds to overview some other general issues which pertain to all the types of agents in the typology. This paper largely reviews software agents, and it also contains some strong opinions that are not necessarily widely accepted by the agent community.

- 1 Introduction
- 2 Software Agents: History and the Context of this Paper
- 3 Who are Investigating Software Agents for What and Why?
- 4 What is an agent?
- 5 A Panoramic Overview of the Different Agent Types
- 6 Some General Issues and the Future of Agents
- 7 Conclusion and a Postscript
- <u>8 Acknowledgements</u>
- 9 References